#### **Ex Parte**

Marlene Dortch, Secretary Federal Communications Commission 445 12th Street SW Washington, DC 20554

Re: PETITION FOR RECONSIDERATION Regarding Revised Rule § 95.1763(c) WT Docket No. 10-119

Dear Ms. Dortch:

On April 6, 2018, representatives from Cobra Electronics Corporation had a conference call with representatives of the FCC's Mobility Division, Wireless Telecommunications Bureau. A complete list of participants in the call is attached to this letter. A series of questions had been posed by the FCC related to a Petition for Reconsideration Regarding Revised Rule § 95.1763(c) submitted by Cobra Electronics for adding FM (Frequency Modulation) channels to the existing AM (Amplitude Modulation) channels. These questions are listed below along with a summary of the response/discussion for each.

- Which countries have CB radios with AM and FM channels in the same spectrum?
  - o Brazil
  - o Russia
  - Most European Countries
    (See attachment for a summary of CB channels and modulation in Europe.)
- Can a user on AM hear any disturbance (i.e., will his squelch be broken) as a result of a user on an FM channel?
  - Yes. If there is enough signal energy to the input of the receiver, the squelch circuit will respond by opening the audio path. However, if the FM station is far enough away from the receiving station and the squelch level is set properly by the AM station operator, then there should be no interference. This is true for other AM transmitting stations as well.
- Do the AM and FM signals on the same channel collide or interfere in any way?
  - Yes. Since the modulation methods are not compatible, a station receiving in AM would hear distorted audio output from a station transmitting in FM. The same is true from a user in FM receive mode. They would hear distorted audio from the FM discriminator output of a detected AM transmitter.
  - o It was discussed that mixed modes are already permitted on CB radios in the USA and have been for quite some time (i.e., Single Side Band (SSB)). The addition of FM as a permitted mode will result in no greater or lesser interference than a station operating in SSB mode on a standard AM channel (and similarly, not all stations have SSB). When an operator hears an unintelligible station on a channel, they simply select another channel to operate on, or they simply switch to the other mode in

- order to hear the other station clearly. It has been this way for quite a long time, and it has not presented a problem.
- o In addition to the SSB analogy, it was observed that a channel being utilized by an FM transmitter and not being understood by someone listening on an AM receiver is not much different than a channel being utilized by an AM transmitter in a language not understood by someone listening on an AM receiver. And in both cases, the user would likely find another channel to utilize.
- Which FM channels are we proposing to add? 1-40? 20-40 (so 9 and 19 are undisturbed)? Other?
  - The recommendation is to add FM mode to all 40 channels.
- If more and more people start using the FM channels, will this cause the AM channels to slowly atrophy into obsolescence? If so, how do you think the customer base react to their AM-only radios essentially becoming obsolete?
  - o It is doubtful that AM would become an obsolete mode. While AM may not be an efficient mode of operation, it does offer the user a way to hear multiple stations at the same time, and it is a well-established operating mode. Whereas the FM mode has the receiver capture effect meaning a user will only be able to hear one station at a time. But FM offers clear, noise free, and more intelligible two-way communications vs AM, which is why FM is popular in other countries and in other radio bands.
  - O AM will likely never go away completely. As an example, in the amateur radio domain, there are operators still using CW (Continuous Wave) and Morse code to communicate on the HF spectrum all over the world. Radio amateurs also use AM, FM, SSB, DSB (Dual Side Band) and digital communications modes. Even though there are newer, better, and more efficient ways to use RF for communications, the original methods are still used to this day, and in all likelihood will continue to be used well beyond the foreseeable future.
  - There is a strong belief that the CB Radio community will greatly embrace the addition of FM to the existing AM mode. It is expanding the capability of the radio and user experience, and it is something that has been successful in other countries for quite a few years. And because it is adding FM mode to AM mode, it would not render their existing equipment obsolete.

Pursuant to the FCC's rules, I have filed a copy of this notice electronically in the above referenced docket. If you require any additional information, please contact the undersigned.

Sincerely,

Michael Williams

Vice President, Engineering and Quality

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Cobra Electronics Corporation

Enclosures

cc: Meeting Participants

## **Participants in the Call**

#### Mobility Division, Wireless Telecommunications Bureau:

Melissa Conway, Attorney Advisor

Thomas Derenge, Deputy Chief

Roger Noel, Chief

Scot Stone, Deputy Chief

### **Cobra Electronics Corporation:**

Wilfred Boudreau - Vice President, Products and Services

Christopher de Waal – Sr. Project Engineer, Radios and Power Products

Ramon Sandoval – Sr. Category Manager, CB Radios and Power Products

Michael Williams - Vice President, Engineer and Quality

# **CB Radio Channel Overview in Europe**

Country	Channels and Modulation
Austria	40 FM
Belgium	40 FM, 40 AM / 40 SSB
Bulgaria	40 FM, 40 AM
Croatia	40 FM, 40 AM / 40 SSB
Cyprus	40 FM, 40 AM / 40 SSB
Czech Republic	80 FM, 40 AM, SSB
Denmark	40 FM, 40 AM, SSB
Estonia	40 FM, 40 AM / 40 SSB
Finland	40 FM, 40 AM / 40 SSB
France	40 FM, 40 AM / 40 SSB
Germany	80 FM, 40 AM / 40 SSB
Greece	40 FM, 40 AM / 40 SSB
Hungary	40 FM, 40 AM / 40 SSB
Iceland	40 FM, 40 AM / 40 SSB
Ireland	40 FM, 40 AM / 40 SSB
Italy	40 FM, 40 AM / 40 SSB
Latvia	40 FM ,40 AM / 40 SSB
Liechtenstein	40 FM, 40 AM / 40 SSB
Lithuania	40 FM, 40 AM
Luxembourg	40 FM. 40 AM / 40 SSB
Malta	40 FM
Monaco	40 FM, 40 AM / 40 SSB
Netherlands	40 AM, 40 FM / 40 SSB
Norway	40 FM, 40 AM / 40 SSB
Romania	40 FM, 40 AM / 40 SSB
Poland	40 FM, 40 AM / 40 SSB
Portugal	40 FM, 40 AM / 40 SSB
Slovak Republic	40 FM + CH 70-80 FM, 40 AM / 40 SSB
Spain	40 FM, 40 AM / 40 SSB
Slovenia	40 FM, 40 AM / 40 SSB
Sweden	40 FM, 40 AM / 40 SSB
Switzerland	40 FM, 40 AM / 40 SSB
United Kingdom	40 FM